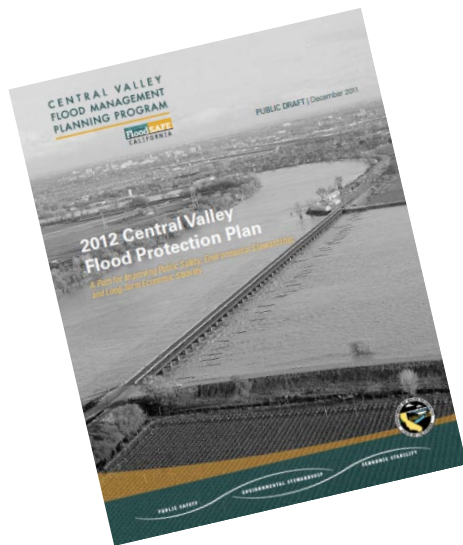


About the 2012 Central Valley Flood Protection Plan



CA Water Plan Public Advisory Committee
April 4, 2012

PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

CVFPP & DWR Integrated Water Planning

- Plan for a Specific Project
- Regional
 - Central Valley Flood Mgmt Plan
 - IRWM
- Statewide
 - SFMP Flood Future Report
 - California Water Plan



Scope of Technical Evaluation

*High-Level
Vision*

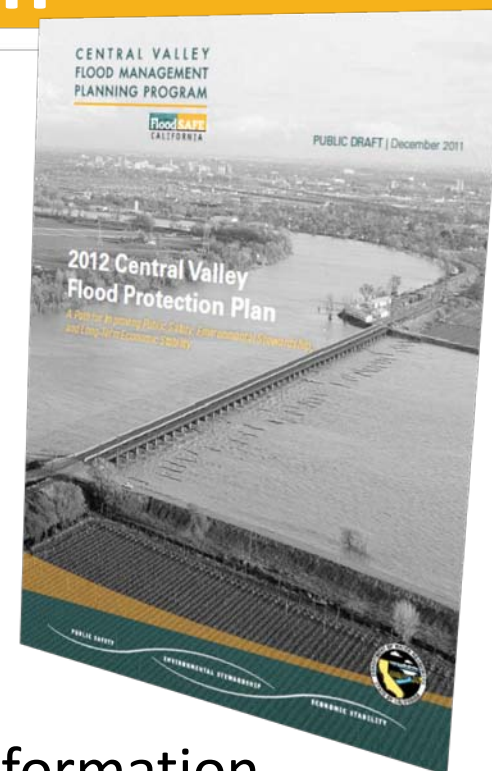
*On-the- Ground
Projects*

Reconnaissance

Feasibility

Project-Specific

- Existing tools / new information
- Reconnaissance level of detail
- Focus on system as whole, rather than local conditions



Flood and Related Risks in the Central Valley

Flood System Infrastructure at Risk

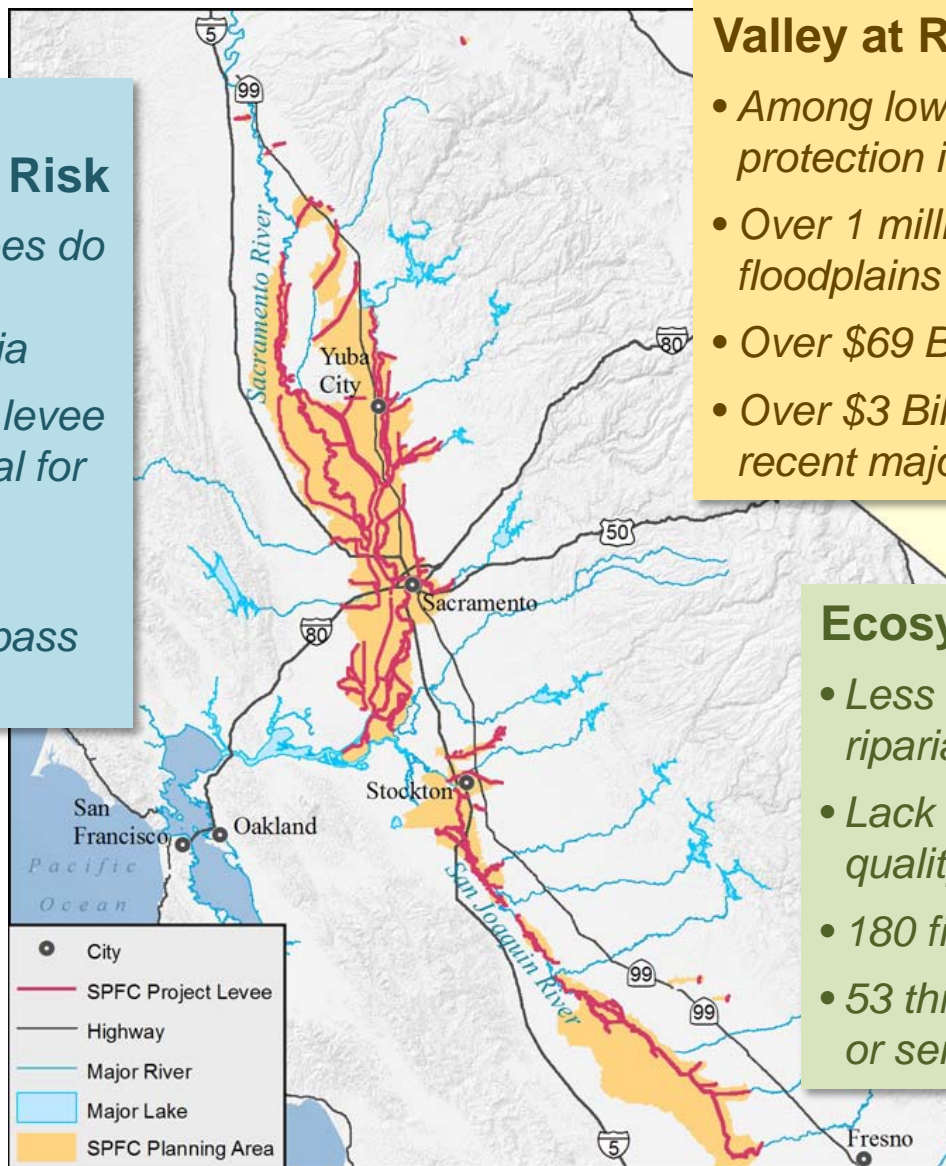
- *Half of urban levees do not meet current engineering criteria*
- *60% of nonurban levee have high potential for failure*
- *Half of evaluated channels cannot pass design flows*

Valley at Risk

- *Among lowest level of flood protection in the nation*
- *Over 1 million people residing in floodplains*
- *Over \$69 Billion in assets at risk*
- *Over \$3 Billion in damages in recent major flood events*

Ecosystem at Risk

- *Less than 4% of historic riparian forest remains*
- *Lack of habitat quantity, quality, and connectivity*
- *180 fish passage barriers*
- *53 threatened, endangered, or sensitive species*



How We Got here:

Preliminary Approaches



**Achieve SPFC
Design Flow Capacity**

Address flow capacity and other conditions for existing SPFC facilities. No major changes to footprint or operation of SPFC facilities



**Protect High
Risk Communities**

Focus on protecting life safety for populations at highest risk, including urban areas and small communities



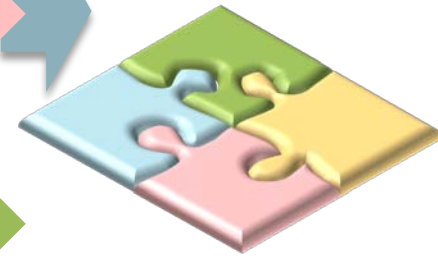
**Enhance Flood
System Capacity**

Seek opportunities to achieve multiple benefits through enhancing flood system storage and conveyance capacity



Policies/Flood Management Strategies Development, Implementation Guidance

**State
Systemwide
Investment
Approach**



Solution: Systemwide Perspective

- Considers the Central Valley flood system as a whole
- Recognizes the State's fundamental interests
 - Public safety
 - Economic stability
 - Environmental stewardship

Protection for Rural-Agricultural Areas and Small Communities



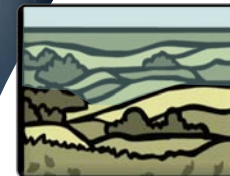
Reservoir Storage Operations



Ecosystem Functions within Flood System



Management of Floodplains



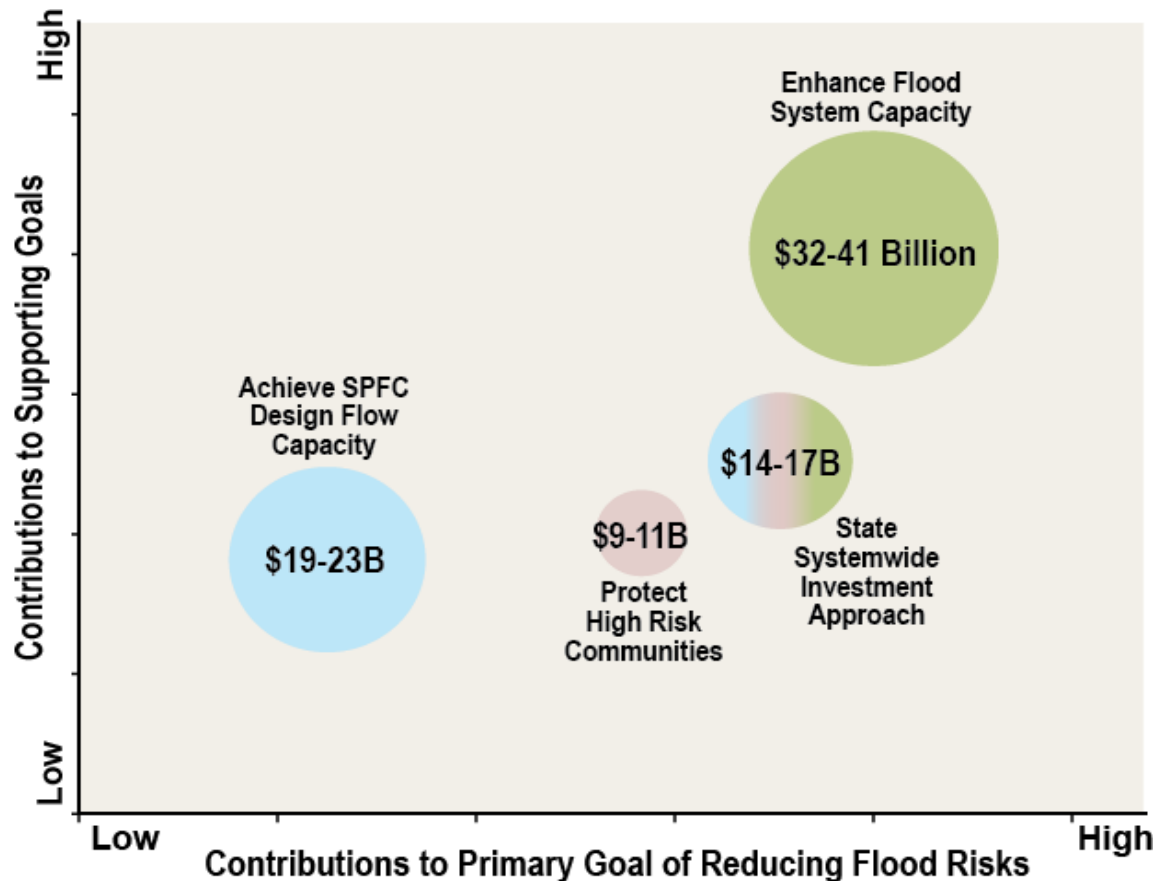
Conveyance of Flood Flows



Protection for Urban Areas



Relative Cost and Performance



Solution: State Systemwide Investment Approach

- Physical elements
 - **Regional Improvements**
 - Urban
 - Small Communities
 - Rural/Agricultural Communities
 - **System Improvements**
- Ecosystem restoration
- Policies, guidance and implementation strategies

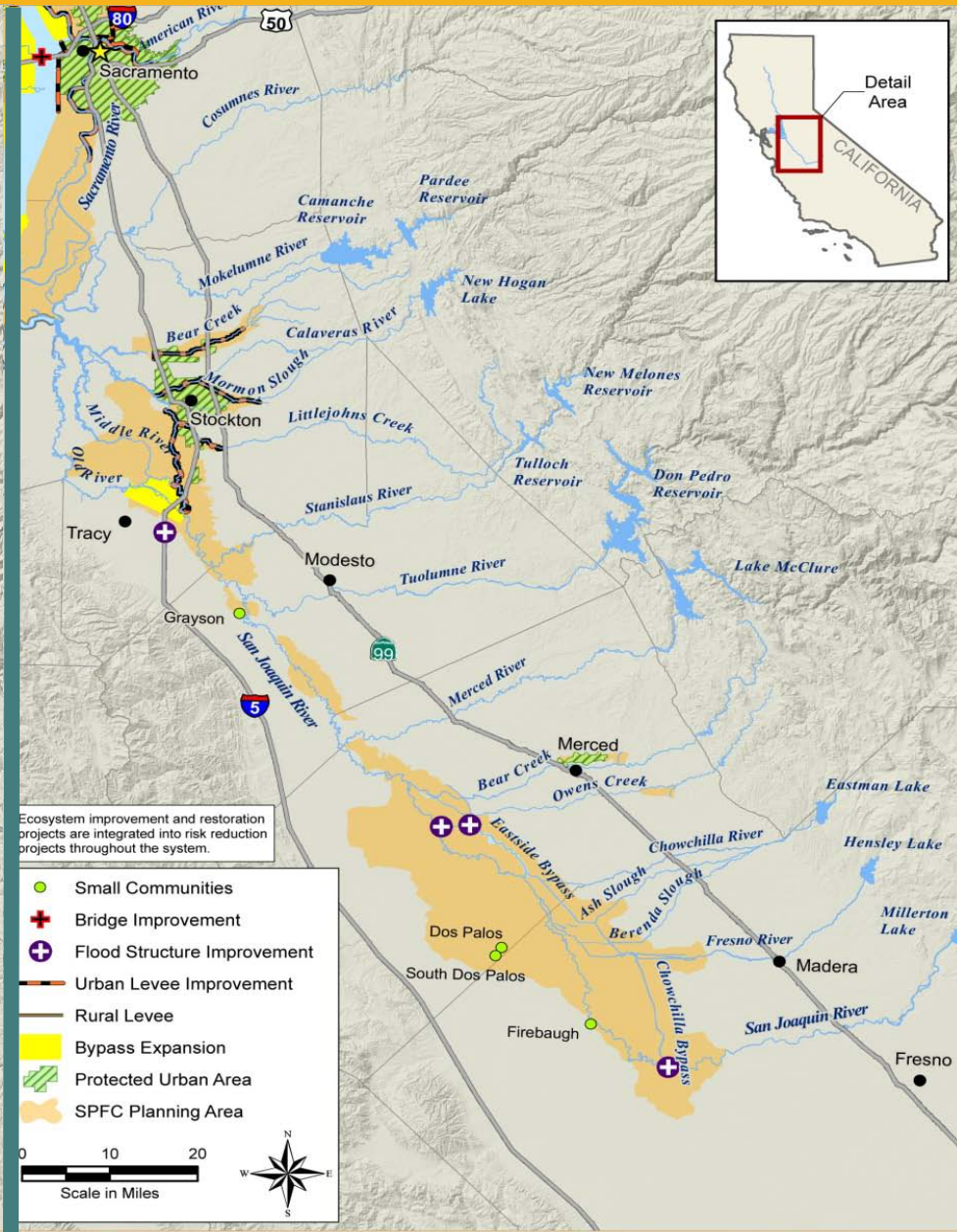
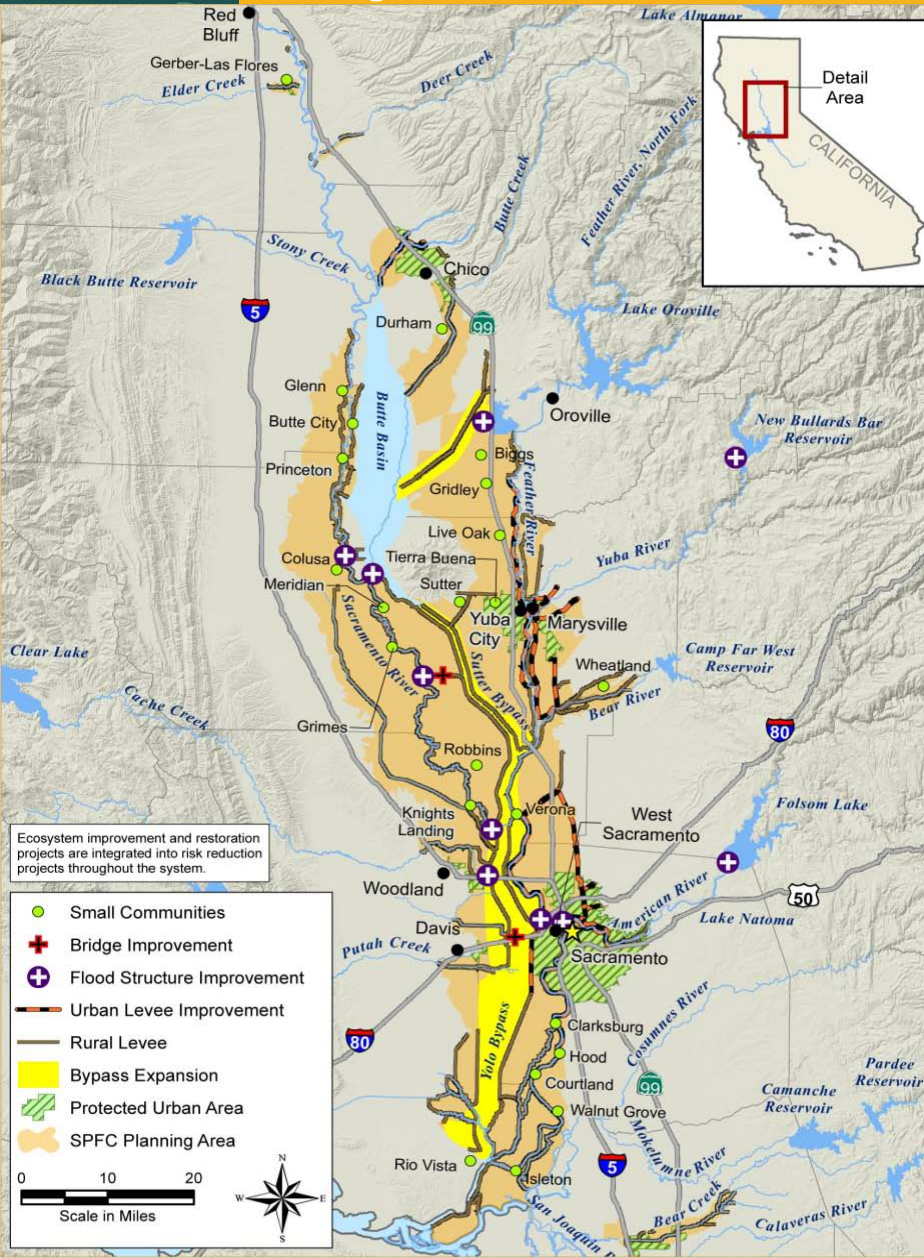


Solution: Benefits of This Approach

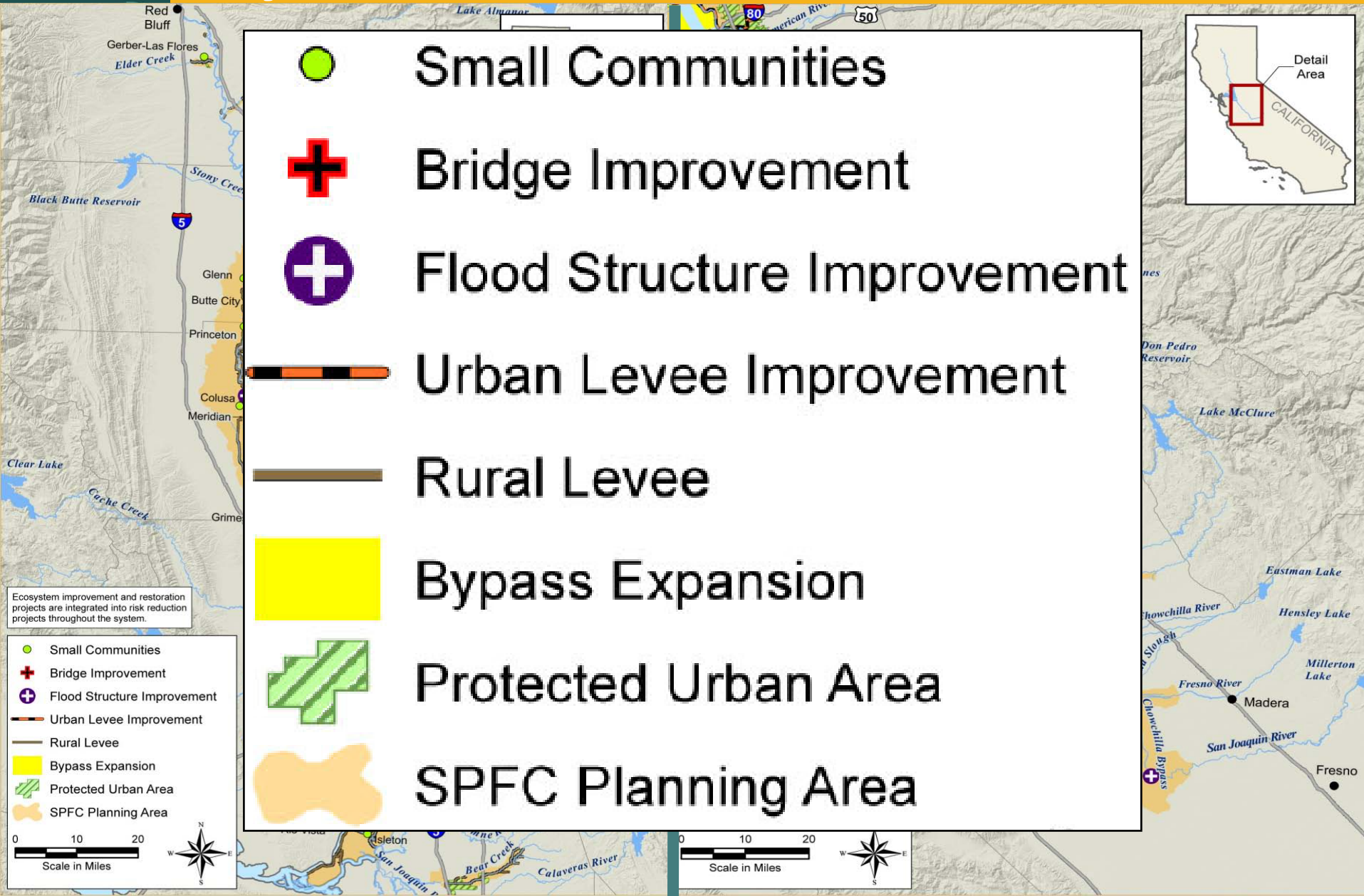
- 49% reduction in life risk
- 67% reduction in expected annual flood damages
- Avoid business losses / increase long-term economic output by over \$100 million
- 10,000 acres new habitat
- 25,000 acres habitat-compatible crops
- Sustain the rural-ag lifestyle
- Resilient and adaptable



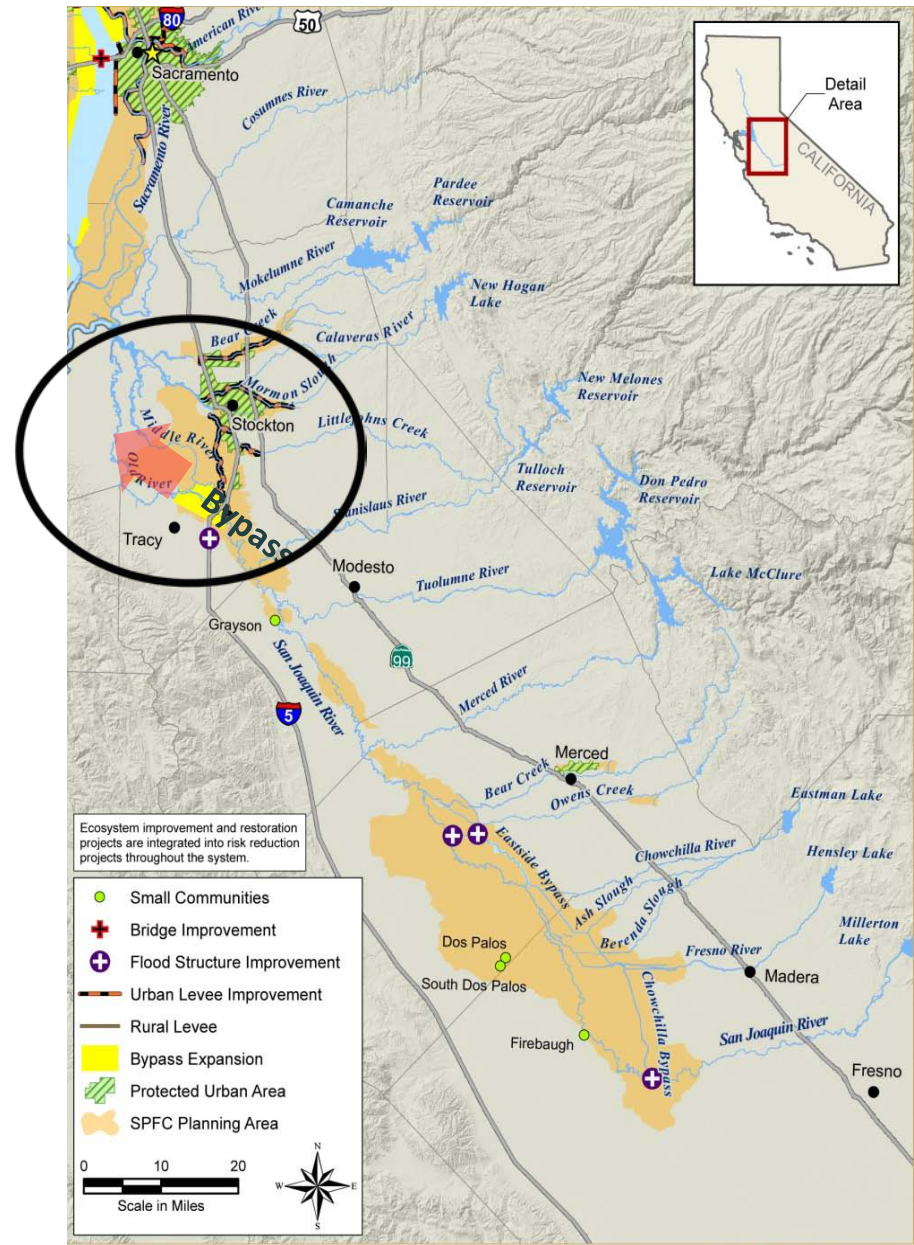
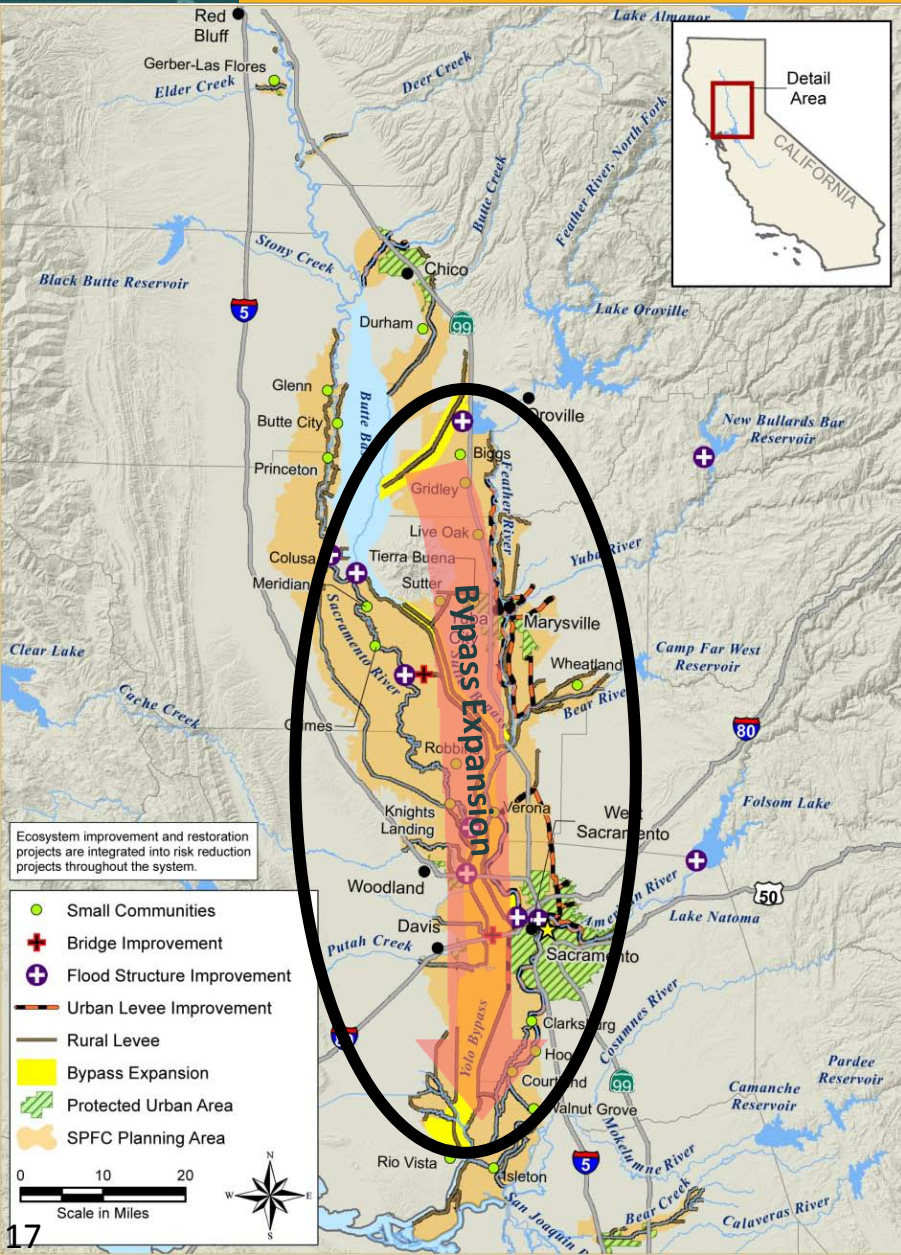
Physical Features of the SSIA



Physical Features of the SSIA



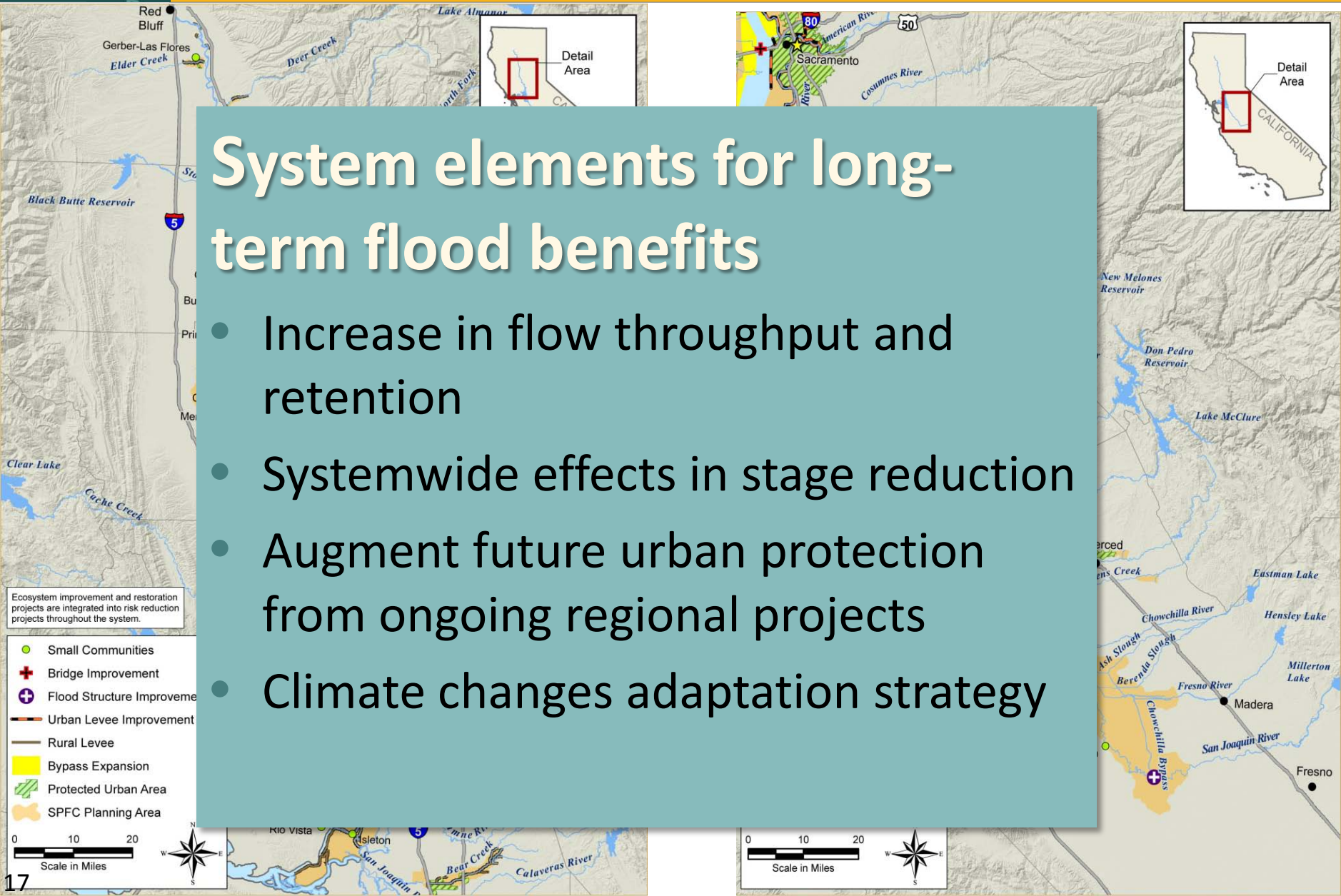
New and Expanded Bypasses



New and Expanded Bypasses

System elements for long-term flood benefits

- Increase in flow throughput and retention
- Systemwide effects in stage reduction
- Augment future urban protection from ongoing regional projects
- Climate changes adaptation strategy



Public Safety Requires Building Resilience

Water Code 9616

- Promote natural dynamic hydrologic and geomorphic processes
- Increase and improve the quantity, diversity, and connectivity of habitats, including the agricultural and ecological values of these lands
- Promote the recovery and stability of native species populations and overall biotic community diversity

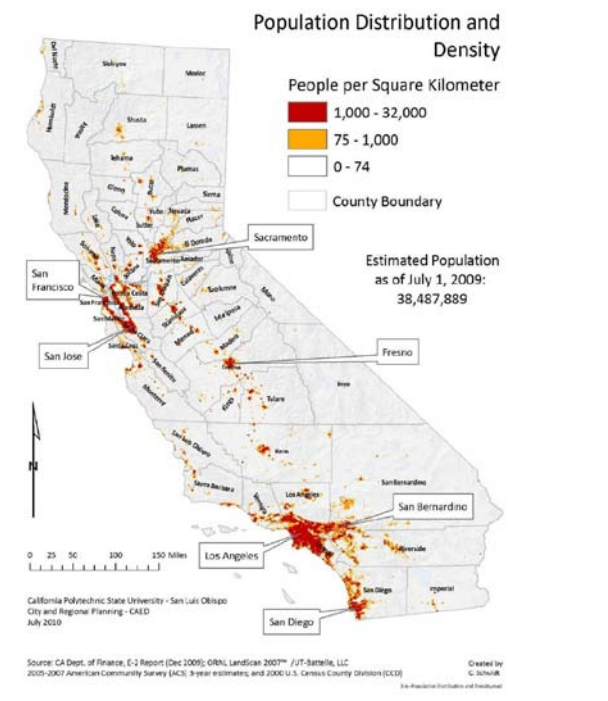
INTEGRATION

PUBLIC SAFETY

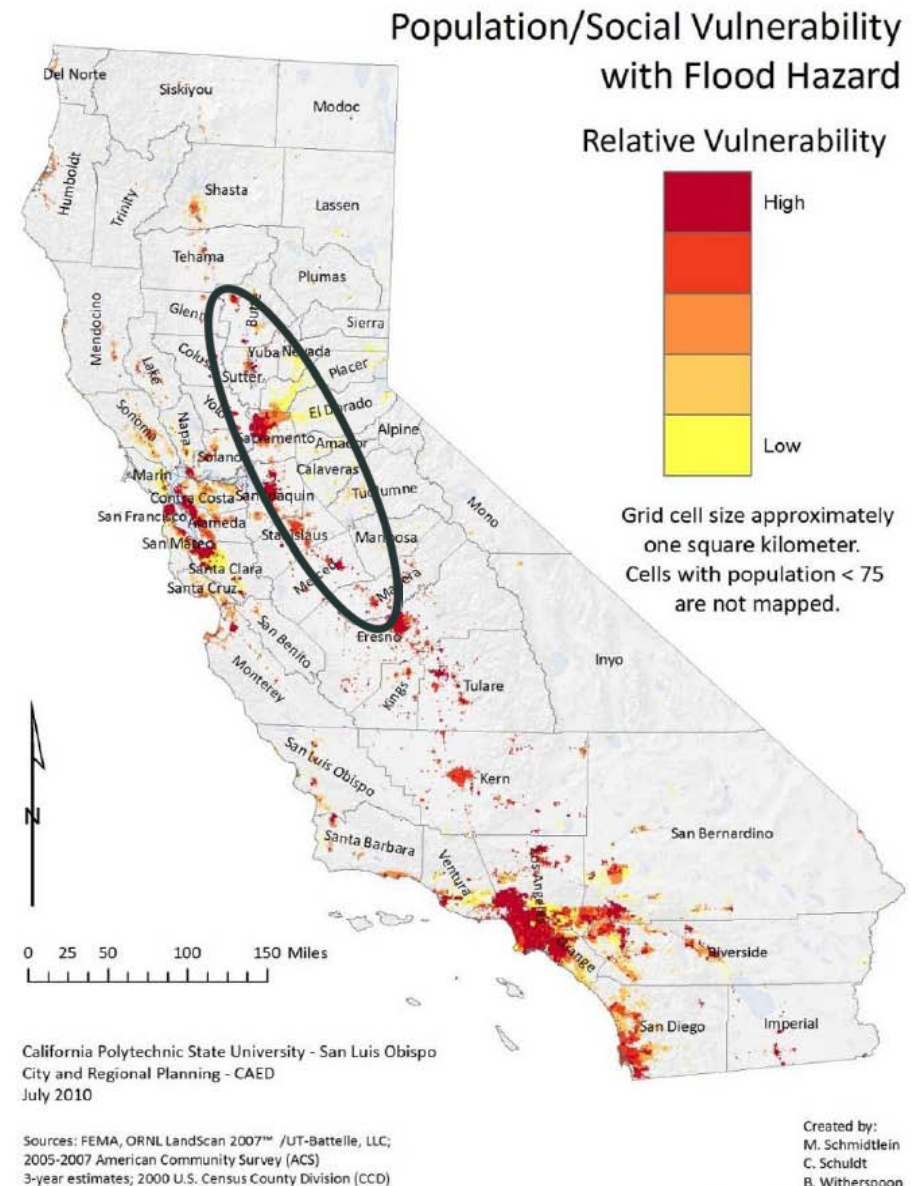
ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

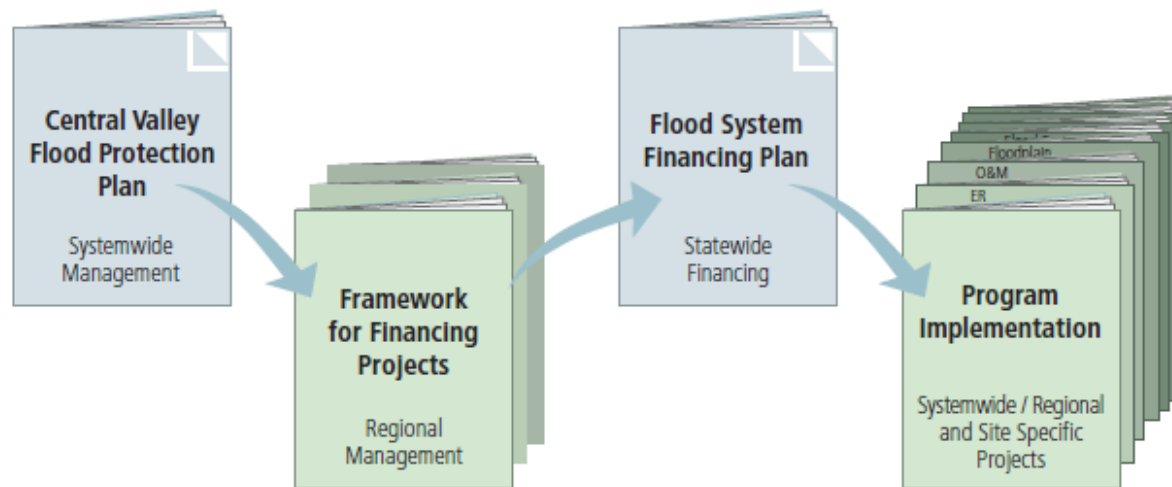
STATEWIDE FLOOD MANAGEMENT PROGRAM



Information from the CVFPP is being incorporated into work on the Flood Future Report.



Financing CVFPP Implementation

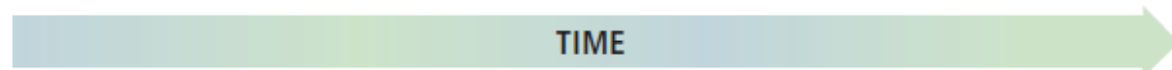


- Flood System Deficiencies
- Capital Improvements
- Managing State-federal Flood System
- Financing Strategy

- Local/State Interest and Funding
- Federal Interest and Funding
- Implementation Issues

- History/Accomplishments
- Five-year Bond Expenditure Plan
- CVFPP Capital Improvements
- Delta Capital Improvements
- Statewide Flood Management Plan Capital Improvements

- 2017 CVFPP
- Two Systemwide Feasibility Studies
- CVFPP Systemwide Improvements
- Urban Improvements
- Rural and Small Community Improvements
- Residual Risk Management



PUBLIC SAFETY

ENVIRONMENTAL STEWARDSHIP

ECONOMIC STABILITY

Public Comments and Hearings

- THE CVFPB IS REQUESTING COMMENTS ON THE PLAN
- For full consideration comments should be made by **April 20**.
- Comments may be emailed or sent via mail. More information on how to comment can be found on the CVFPB website at:
<http://www.cvfpb.ca.gov/>
- Visit the CVFPP Representative during the Poster Session for more details.

Public hearings:

- April 5, Downtown Sacramento
- April 6, Marysville
- April 9 , Stockton
- April 11, Woodland

Summary and Next Steps

- **There is an urgent need**
 - Over one million people and \$69 billion at risk
- **The CVFPP provides a path forward**
 - It will be costly: \$14-17 Billion
 - It will take a long time to implement: 20+ years
 - We are already making progress: \$1.6 Billion in early implementation investments
- **There is still work to do**
 - Public review and Board adoption process
 - Regional planning and financing strategy
 - State and USACE feasibility studies